

CLAIMS

1. A composition for treating HCV infection in a
5 human, comprising alpha-interferon or a derivative
thereof and an IMPDH inhibitor, wherein said IMPDH
inhibitor is present in said composition in an amount
such that a ratio of C_{avg}/C_{min} is between 1 to 10;
wherein:

10 C_{avg} is average plasma concentration produced by
said IMPDH inhibitor in said human; and

C_{min} is estimated trough concentration produced by
said IMPDH inhibitor in said human.

15 2. A method for treating HCV infection in a human
comprising the step of administering to said human an
optimal composition comprising alpha-interferon or a
derivative thereof and an IMPDH inhibitor, wherein said
optimal composition contains said IMPDH inhibitor in an
20 amount such that a ratio of C_{avg}/C_{min} is between 1 to 10;
wherein:

C_{avg} is average plasma concentration produced by
said IMPDH inhibitor in said human; and

25 C_{min} is estimated trough concentration produced by
said IMPDH inhibitor in said human.

3. A method for evaluating the suitability of a
composition comprising an IMPDH inhibitor and alpha-
interferon for treating HCV infection in a human, said
30 method comprising the steps of:

a. administering to said human said composition
comprising said IMPDH inhibitor and said alpha-
interferon;

- b. determining average plasma concentration produced by said IMPDH inhibitor in said human ("Cavg");
- c. determining trough concentration produced by said IMPDH inhibitor in said human ("Cmin");
- 5 d. calculating a ratio of Cavg/Cmin;
- e. deeming said composition to be suitable for treating HCV infection if said ratio is between 1 to 10.

4. A method of producing an optimal composition for
10 treating HCV infection in a human, wherein said optimal composition comprises alpha-interferon or a derivative thereof and an optimal amount of an IMPDH inhibitor, said method comprising the steps of:

- a. administering to said human a first composition
15 comprising a first amount of said IMPDH inhibitor and said alpha-interferon;
- b. determining average plasma concentration produced by said first amount of said IMPDH inhibitor in said human ("Cavg");
- 20 c. determining trough concentration produced by said first amount of said IMPDH inhibitor in said human ("Cmin");
- d. calculating a ratio of said Cavg to said Cmin;
- e. modifying said first amount of said IMPDH
25 inhibitor in said first composition to produce said optimal composition wherein said ratio is between 1 to 10.

5. The method according to any of claims 1-4,
30 wherein said ratio is between 1-8.

6. The method according to claim 5, wherein said ratio is between 3-8.

7. The method according to claim 6, wherein said ratio is between 5-8.

5 8. The method according to any of claims 1-7, wherein said IMPDH inhibitor is selected from mycophenolic acid, ribavirin, VX-497, VX-148 or VX-944.

9. The method according to claim 8, wherein said
10 IMPDH inhibitor is selected from ribavirin, mycophenolic acid or VX-497.

10. The method according to claim 9, wherein said IMPDH inhibitor is ribavirin.

15 11. The method according to claim 10, wherein said IMPDH inhibitor is VX-497.

12. The method according to claim 10, wherein said
20 IMPDH inhibitor is mycophenolic acid.